This project assignment is partly about attention and focus. It is also about finding beauty in chaos and the exquisite order of things. It will be due one week from next Sunday, on October 26th. It will be easier to start the drawing early, then work on it periodically through the following days. It should be obsessively detailed to utilize (not necessarily cover) the space of the entire page. Check out the attached graphic for specific instructions.

Also attached are 2 "obsessive" drawings by Daniel Zeller and 2 by Tom Friedman. The second Friedman drawing is a detail from a project titled "Everything" where the artist wrote down all the words in the English language on a 36x36" piece of paper.

Discussion questions for Margaret Heffernan's "Embrace the Unknown: The Benefits of Learning to Live with Uncertainty" (The Guardian, April 23, 2023).

You'll want to make sure you're devoting enough time to each question—it's likely each question will take you about three or four minutes to consider thoughtfully. In your discussions, feel free to bring in examples from your own experiences.

1. What's the deeper difference between "uncertainty" and "ignorance," and why does it matter? Heffernan argues we feel uncertainty when we know enough to sense there's more we don't know. Why is that distinction so important, especially in decision-making or creative life?

Uncertainty deals with known variables and calculable probabilities, even if the outcome isn't definite. And Ignorance deals with unknown variables or relationships, rendering probabilities incalculable or even unimaginable. This difference matters because it determines which decision-making strategies are available and appropriate. While uncertainty is a lack of clarity about outcomes for which the possible options are known, ignorance is a more profound lack of knowledge that can involve unknown outcomes, factors, or probability distributions. And the distinction is so important for decision making because it affects the method. You cannot manage ignorance in the same way you manage uncertainty. Ignorance calls for building resilience and adaptability, whereas uncertainty allows for probability-based strategies. Changes the objective. In uncertainty, the goal is often to optimize for the most probable outcome. In ignorance, the goal shifts to maximizing robustness, choosing an approach that performs reasonably well across a broad and unknown range of scenarios.

2. Why might we prefer knowing "doom" to feeling "doubt"? Studies cited show people are calmer when something bad is certain than when the outcome is unknown. What does that reveal about human psychology and what assumptions do we make about control?

We prefer knowing "doom" to feeling "doubt" because of the psychological and practical advantages of having a definitive conclusion, even a negative one.

· Free up mental resources. The constant mental energy spent agonizing over different outcomes in a state of doubt is taxing and unproductive. Once a definitive, negative outcome is known, that cognitive load is removed, allowing for focus on immediate priorities.

· Allow for closure. A known outcome, no matter how bad, provides a clear end point. It eliminates the emotional turbulence of "what if" and enables the individual to move into a phase of acceptance and emotional processing.

3. In what ways can our craving for certainty blind us to important doubts?

A craving for certainty can blind us to important doubts by triggering cognitive biases like confirmation bias, which makes us favor information that supports our beliefs while ignoring contradictory evidence.

The article warns that certainty can mask small red flags. Can you think of real-world or personal examples where overconfidence made people or organizations miss something critical?

4. Science and art both thrive in uncertainty, but how, exactly? Both Science and Art Both fields encourage resilience, as failure and ambiguity are integral to growth and innovation.

Heffernan notes scientists embrace doubt, and artists sail into the unknown. What specific examples illustrate how this uncertainty fuels creativity?

5. How does certainly become a vice rather than a virtue in technological culture?

In technological culture, certainty becomes a vice by fueling overconfidence, suppressing critical thinking, and blinding people to the inherent uncertainties of complex systems. When tech developers and consumers overemphasize certainty, they neglect risks, create biased and rigid systems, and miss opportunities for genuine innovation.

With apps promising precise tracking and predictions, we’re tempted to outsource uncertainty. How might that diminish our own capacity to think, wonder, or question?

Relying on an external source for thinking, wondering, and questioning can diminish your own capacity for these skills through a process known as "cognitive offloading".

Cognitive atrophy: Regularly outsourcing your thinking to technology can cause the neural pathways associated with complex thought to become less efficient. This leads to a decline in higher-order cognitive skills like deep analysis and evaluation.

6. Can we cultivate curiosity instead of suppressing uncertainty and, if so, how?

Yes, you can cultivate curiosity by reframing uncertainty as a learning opportunity, rather than something to be feared. This involves actively asking open-ended questions, embracing new experiences and challenges, and developing a growth mindset that values learning over having all the answers.

The article suggests sitting with uncertainty as the root of curiosity. What habits or mindsets would help you tolerate (and maybe even welcome) uncertainty in your academic or personal life?

Mindsets to cultivate

· Embrace a growth mindset: View challenges and setbacks as opportunities for learning, growth, and development rather than as threats. Instead of seeing uncertainty as an obstacle, you can see it as a space for new possibilities where innovation and resilience are born.

· Shift from "threat" to "opportunity": Train yourself to reframe the narrative in your mind. When an uncertain situation arises, pivot from an anxious "What if this all falls apart?" to a curious, "What could this new situation make space for in my life?".

· Focus on process, not just outcome: Accept that you cannot always control the result of your efforts. By focusing on the process—your actions, values, and decisions—you can reduce the anxiety that comes from obsessing over future outcomes.

· Practice radical acceptance: Accept what is happening in the present moment without resistance or judgment. This doesn't mean you have to like the situation, but accepting your circumstances is the first step toward moving forward.

7. What's the value of "constructive doubt," and what forms does it take?

Constructive doubt is the value of questioning assumptions and being open to new information to deepen understanding and improve decision-making, rather than being paralyzed by uncertainty.

Heffernan encourages doubt that challenges the status quo while sparking creativity and growth. How might "constructive doubt" look in a classroom, in society, or in your own beliefs? Are there risks doubting? And are there possible benefits beyond what you've previously considered?

Based on Margaret Heffernan's work on "constructive conflict" and the broader concept of "constructive doubt," this process involves intentionally questioning assumptions to improve ideas rather than tear them down. It is a distinction between productive skepticism and destructive cynicism.

Constructive doubt in a classroom

In a classroom setting, constructive doubt is a central tool for learning and development.

Teacher modeling: An educator models constructive doubt by thinking aloud and expressing their own uncertainty about a topic or a search for "the right answer." This helps students see that grappling with an issue is a normal part of the learning process.

Encouraging inquiry: Teachers encourage students to ask, "why not?" instead of simply "why?" to expand the scope of their inquiry. For example, instead of accepting a textbook's explanation of a historical event, students are challenged to question why alternate outcomes didn't occur.

Reflecting on my mistakes: When students make a couple of mistakes, teachers reframe them as learning opportunities rather than failures. This helps encourage students to analyze what their errors are, and create plans to avoid them in the future, and not being paralyzed by the fear of being wrong.

Peer review: In peer review, students are taught to provide thoughtful, questioning feedback aimed at strengthening the work, not just criticizing it. This fosters an environment where diverse perspectives are used to refine and improve

Topic: My new beginning of my Southern Owl Adventure. (Here, I wonder if casting your topic as being less about your own experience(s) and more about the journey many students make might make your topic more researchable.)

Inquiry Questions:

How will you discover who you are during your freshman year at Southern?

What challenges will you overcome when you're struggling during your freshman year?

How do professors help people who are autistic?

Research Steps:

1. Background: I learned from the professor's slideshows and presentations involving ideas for the FYRA project as examples for me, I looked up an image that would show dedication, and teamwork. I started with making connections back from my years of derby public schools,

2. Data Gathering: Several months ago, I read a book about Guide to Autistic Young Adults that had details on what you need to know about college and ways to deal with autism through resources and guidelines. And I was looking through the southern website about the information about academics and scholarships for an outstanding education and success. I searched up some websites involving connection and belonging, and it showed me lots of answers I needed for research

3. Experiential Investigation: I visited multiple websites and did surveys for my DHS educator and my Accommodations for high school experience research. I looked through the Buley Library, and Mr. Donahue explained that Accommodations is a place for tutor, and study-groups

4. Analysis of Findings: I had analyzed from the college websites and found about freshmen experiences on the SCSU website, and I also discovered motivational experiences about freshmen year at the welcome week, and when I met some amazing people, and observed some details involving connection and interaction.

5. Poster Formatting

a. I'm doing my research into a poster rectangular shape and make and use the data I collected to make my poster more presentable.

b. I am going to make the research more specific, with details, from the sources involving connection, and belong, thus will make the poster filled with the knowledge for Fyre project.